

Region 5 FY 2012 Annual Work Plan

1. Introduction

1.1. Present the vision, goals, and objectives for the regional I&M Initiative.

The National Wildlife Refuge System Inventory and Monitoring (NWRS I&M) Initiative is designed to address the Refuge System's mission-critical information needs, and to help plan and evaluate the effectiveness of conservation strategies implemented by USFWS and conservation partners in the face of accelerating climate change and growing threats from other environmental stressors. This annual report describes the implementation of the NWRS I&M Initiative within the Northeast Region (Region 5) during FY 2011. A memo dated February 5, 2010 from the Region 5 Chief of Refuges provided two-year Annual Work Plan advice for NWRS stations in this region, including implementation of the I&M Initiative.

Vision for the Region 5 Refuge Program

To use sound science that informs management decisions to allow us to be effective and efficient in our management, and identifies our most important resource contributions at the local refuge, LCC, and Regional landscape scales.

This Program is guided by six priorities established by the USFWS Directorate

- National Wildlife Refuge System: Conserving our Lands and Resources.
- Landscape Conservation: Working with Others.
- Migratory Birds: Conservation and Management.
- Threatened and Endangered Species: Achieving Recovery and Preventing Extinction.
- Aquatic Resources: National Fish Habitat Action Plan and Trust Species.
- Connecting People with Nature: Ensuring the Future of Conservation.

The Region 5 Chief of Refuges identified five goals for FY 2010 and FY 2011, the last of which addresses the NWRS I&M initiative:

Goal 1: Provide for management of habitats and populations on refuge lands

Goal 2: Implement actions needed to meet the outcomes and outputs that are incorporated into the Regional Annual Performance Planning System (RAPP) targets, and by extension Government Performance and Results Act (GPRA) and the President's Management Agenda, and each refuge's Annual Work Plan

Goal 3: Implement the six priorities of the Service

Goal 4: Begin needed work to rebuild staff on field stations now that base budgets and financial solvency have been attained

Goal 5: Begin Implementation of the NWRS I&M efforts in accordance with the *Draft Strategic Plan for Inventories and Monitoring on National Wildlife Refuges: Adapting to Environmental Change*.

Multiple tasks were listed under each of the six Service priorities. The tasks that directly pertain to the I&M efforts are summarized below:

Task 1: Use common and scientifically defensible inventory and monitoring procedures where possible and available. Discontinue inventory processes that do not support priority work, yield useful data, or are scientifically deficient (adapted from Goal 5 above).

Task 2: Comprehensive Conservation Plan (CCP)/Habitat Management Plan (HMP) and Wildlife Inventory and Monitoring Plan. Continue to make CCP completion your highest priority, through educating staff and facilitating contracting, as well as working closely with the planner/coordinator who is assigned to your project. The CCP remains the number one priority, per the Director's guidance.

Task 3: Participate in ecoregional planning/Landscape Conservation Cooperative (LCC) activities with other programs and Service partners. Ensure that CCPs and HMPs incorporate ecoregional priorities (i.e., LCC Plans when available; bird conservation region plans, fish habitat joint venture plans, recovery plans, State Wildlife Action Plans).

Task 4: Participate in multi-refuge efforts to manage similar habitats for migratory birds and other wildlife. Monitor birds using the best available scientifically defensible protocols.

Task 5: Impoundments. Many of our impoundments are critical to waterbird migration and management. Impoundments also provide opportunities for wildlife viewing that can help build support for conservation. As each refuge completes its CCP and HMP, you should critically examine your impoundments, especially those that are in-stream, to determine if they are meeting refuge objectives. If impoundments are not helping us to meet our trust resource values, or they do not contribute to the purposes for which the unit was established, then serious consideration should be given to restoration of stream and coastal habitats for birds, fish, and mussels. This should be consistent with your refuge purposes, a priority for your ecoregion, or a focus of fishery management efforts as defined by FR and/or our Partners.

Task 6: Evaluate the management decisions made (local, landscape, and regional) and determine what data are needed to help make informed decisions (added by Region 5 Division of Natural Resource staff to meet the Chief's goals).

Task 7: Assist in addressing refuge controversial issues, public-use impacts, and other issues (added by Region 5 Division of Natural Resource staff to meet the Chief's goals).

Task 8: Provide NCTC training (added by Region 5 Division of Natural Resource staff to meet the Chief's goals).

1.2. Briefly describe how the regional I&M Initiative is organized and planned focus areas.

Region 5 has many existing and ongoing projects that relate to I&M, adaptive management, and strategic habitat conservation. These projects generally fall under coastal ecosystems, freshwater wetlands, and shrub and forested habitats. I&M-funded staff work with other staff within the R5 Division of Natural Resources (DNR) in support of these projects and other similar, refuge-specific projects.

1.3. Explain how the regional I&M Initiative integrates with the refuge biological program in the region.

In response to the NWRS I&M Initiative, the Region 5 Refuges Program reorganized to create a Division of Natural Resources (DNR) that contained regional biological staff that would provide support for new and ongoing I&M projects as well as in making both regional- and refuge-specific biological decisions. Three of the six I&M-funded positions are integrated within DNR. DNR staff is supervised by a Division Chief and is comprised of a Regional Refuge Biologist, an Assistant Regional Refuge Biologist, a Wildlife Biologist, the Regional I&M Coordinator, Modeler (vacant, I&M position shared with Region 3), and the I&M Database Manager. The DNR Chief is supervised by the Region 5 Deputy Chief of Refuges.

1.4 Explain how the regional I&M initiative coordinates with partners via the Landscape Conservation Cooperatives (LCCs). Which LCC's are included in the regional I&M initiative? What role does the regional I&M initiative serve within the LCC?

The R5 I&M Coordinator is co-located in the Northeast Regional Office with these FWS programs and Science Applications staff (including the North Atlantic LCC Coordinator). The I&M Coordinator regularly communicates with staff from other Service programs, and attends the weekly Science Applications staff meeting when not on travel. For instance, the I&M Coordinator worked with the Avian Health and Disease Program's (AHDP's) R5 representative with Migratory Birds to use AHDP funds to hire biotechs as part of the Integrated Waterbird Management and Monitoring (IWMM) pilot project; these and existing biotech collected data to help inform the IWMM effort and survey design plans for ADHP (i.e., baseline data on occurrence of diseased and dead birds in Regions 3, 4 and 5).

2. Staffing

The Regions 5 Refuges staffing model for its Biology program is based on DNR staff plus shared regional positions designed to support I&M projects, in part. These shared positions typically are located at field stations, are supervised by project leaders, and have 50% regional responsibilities (GIS staff have 100% regional responsibilities). R5 is in the process of setting regional goals and objectives that will inform how these regional shared positions will better integrate with DNR efforts and support I&M projects. Three of the I&M funded staff are in the regional biology program (DNR) so are not affiliated with a specific LCC. The remaining three (NF-LMRD) staff are located in refuges in New England, which falls within the North Atlantic LCC.

I&M-funded Staff within DNR

Bill Thompson, Regional I&M Coordinator, Regional Office, Hadley, MA
Kelly Chadbourne, Regional I&M Data Manager, Great Bay NWR and Falmouth, ME Field Office
Modeler (Vacant, 0.5 position to be shared with Region 3 and filled in FY12)

Other R5 DNR Staff

Fish & Wildlife Administrator, Chief of DNR (Vacant – to be filled in FY12), Regional Office, Hadley, MA
Janith Taylor, Regional Refuge Biologist, Great Bay NWR, Newington, NH
Laura Eaton-Poole, Wildlife Biologist, Great Bay NWR, Newington, NH
Jennifer Casey, Assistant Regional Refuge Biologist, Umbagog NWR, Errol, NH

Shared Regional Biology Positions – I&M Funded

Thomas LaPointe, Northern Forest Land Management Research Demonstration (NF-LMRD) project
Supervisory Forest Ecologist, Umbagog NWR, Errol, NH
Michael Heath, NF-LMRD Forester, Moosehorn NWR, Baring, ME
Jeremy Goetz, NF-LMRD LMRD Forestry Tech., Silvio O. Conte NFWR (Nulhegan Basin
Division), Brunswick, VT

Shared Regional Biology Positions – Other Funded

Susan Adamowicz, LMRD Saltmarsh Biologist, Rachel Carson NWR, Wells, ME
William Crouch, Coastal Ecologist, Edwin B. Forsythe NWR, Oceanville, NJ
Curt Kessler, Coastal Ecologist, Long Island NWR Complex, Shirley, NY
Fred Wurster, Hydrologist, Great Dismal Swamp NWR, Suffolk, VA
David Bishop, Invasive Species Biologist, Back Bay NWR, Virginia Beach, VA
Richard Schauffler, GIS Specialist, Rachel Carson NWR/Great Bay NWR, Newington, NH
Leslie Vilchek, GIS Specialist, Blackwater NWR, Cambridge, MD
John Eaton, GIS Specialist, Silvio O. Conte NFWR, Sunderland, MA

Key Cooperators

Bernd Blossey, Cornell University
Jeff Buler, University of DE
John Coluccy, Ducks Unlimited
Deanna Dawson, USGS Patuxent Research Center
Chris Dwyer, Region 5 USFWS Migratory Birds
Glenn Guntenspergen, USGS Patuxent Research Center
Mike Irwin, USGS Patuxent Research Center
Sarah Jacobi, Chicago Botanical Gardens
M.J. James-Pirri, University of RI
Tim Jones, Region 5 USFWS Migratory Birds
Eric Lonsdorf, Chicago Botanical Gardens
Jim Lynch, National Park Service
Jim Lyons, Region 9 USFWS Migratory Birds
Laura Mitchell, Region 5 USFWS Fire Program
Clint Moore, USGS Patuxent Research Center
Hillary Neckles, USGS Patuxent Research Center
Norb Psuty, Rutgers University
C. J. Ralph, U.S. Forest Service, Pacific Southwest Research Station
Greg Shriver, University of DE
John Stanton, Region 4 USFWS Migratory Birds
Andy Wilson, Gettysburg College

3. Planned Activities and Anticipated Products

Tables 1 and 2 represent the projected activities by I&M-funded staff and projects (even if only in part). Additional projects will likely be initiated once a final budget has been received.

Table 1. Region X Inventory and Monitoring Activities, by Project or Theme

Blueprint Objectives and Tasks	Project or Theme; Status	Planned Product	Staff
IDENTIFY I&M PRIORITIES			
General	<i>Develop scientifically credible Refuge I&M Plans</i> Work with groups of refuges to identify appropriate surveys that will help to inform management decisions.	Revised Refuge I&M Plan Part 1	Thompson (DNR-I&M) Chadbourne (DNR-I&M) <i>Other DNR staff:</i> Taylor Casey Eaton-Poole
General	<i>Regional Goals and Objectives</i> DNR staff are developing regional goals and objectives to be used as their work guidance and to better integrate shared regional biologist positions into DNR and I&M projects.	Draft document outlining regional goals and objectives.	Taylor (DNR; lead) Eaton-Poole (DNR) Casey (DNR) Thompson (DNR-I&M) Chadbourne (DNR-I&M)
ABIOTIC RESOURCES			
2A	<i>Water Resource Inventory and Assessment (WRIA)</i> WRIAs initiated at Erie and Moosehorn NWRs. Regional Hydrologist Fred Wurster initiated a contract to conduct the baseline information gathering for 8 refuges (TBD) during FY11-13; this information will be used to complete the WRIAs. Refuges included in FY12 are TBD.	Initiation of WRIAs.	Wurster (Regional Hydrologist) Taylor (DNR) Thompson (DNR-I&M)
2A	<i>Hydrogeomorphic Assessment</i> Continue hydrogeomorphic (HGM) assessment at Erie NWR.	Continuation of HGM	Wurster (Regional Hydrologist)
5A	<i>Coastal shoreline change monitoring</i> Work with cooperators (NPS, Rutgers Univ.) to implement standard protocol for monitoring coastal shoreline change on selected Region 5 refuges.	NPS to assist with training staff; implement first round of surveys.	Taylor (DNR) Eaton-Poole (DNR) Chadbourne (DNR-I&M)
5A	<i>Step-down planning and activities from National Climate Change Plan</i> Initiate vulnerability assessments for two refuges. Provide assessment tool for all refuges. Assist with setting goals and objectives f CCP/HMP.	Vulnerability assessments for Parker River NWR (individual refuge assessment for CCP) and Eastern Shore of VA NWR (Pilot for NWRS)	Taylor (DNR) DNR staff
1E	<i>National Vegetation Mapping Team</i> Regional GIS Specialist will continue to participate in the National I&M Vegetation Mapping Team.	Team membership	Vilchek (Regional GIS Specialist)
2A	<i>National Water Monitoring Team</i> Regional Hydrologist will continue to participate in the National team	Team membership	Wurster (Regional Hydrologist)
BIOTIC RESOURCES			
1C	<i>Analyze and interpret both legacy and current biological data collected on refuges</i> Hire or contract a biometrician to assist Region 5 refuges with analysis of their legacy I&M data.	An agreement or contract to hire a biometrician.	Thompson (DNR-I&M)

Blueprint Objectives and Tasks	Project or Theme; Status	Planned Product	Staff
General	<i>Wilderness Character Monitoring</i> Ongoing pilot project to develop wilderness character monitoring programs at Great Swamp, Forsythe, and Moosehorn NWRs. Funded through the national I&M office.	Reports	Henry (Great Swamp NWR) Thompson (DNR-I&M)
4B	<i>National Phenology Network</i> Engage in phenology based citizen science; partner with the National Phenology Network (NPN). Serve on the Northeast Phenology Working Group.	Working group participation	Eaton-Poole (DNR)
4C	<i>Migrating Fall Landbirds/Shrubland Habitats</i> Ongoing project to develop a rapid monitoring protocol suitable for assessing the status and change over time in populations of fall-migrating landbirds using shrub habitats on refuges.	Draft final report	Taylor (DNR) Eaton-Poole (DNR) Thompson (DNR-I&M)
4C	<i>Bird Monitoring Team</i> Serve on national I&M Team for coordinating bird monitoring efforts among regions and with partners.	Team membership	Thompson (DNR-I&M) Taylor (DNR)
General	<i>Northern Forest LMRD</i> The Northern Forest Land Management Research and Demonstration (NF-LMRD) project is a landscape-level alliance between northern forest refuges (Umbagog, Moosehorn, Petit Manan, Silvio O. Conte, and Missisquoi) and their partners that focuses on scientifically based testing and development of best forest management practices for wildlife in the northeast.	Initiate effort	I&M funded staff: LaPointe (Forester) Heath (Forester) Goetz (Forestry Tech.)
STRESSORS			
1F, 3A	<i>R5 Phragmites Management Project</i> Ongoing project using an SDM process to develop a tool for effective management of <i>Phragmites</i> .	Ongoing	Taylor (DNR) Eaton-Poole (DNR) Thompson (DNR-I&M)
3A	<i>Invasive Species Mapping Project</i> An invasive species pilot program is being developed to evaluate inventory and monitoring objectives and methodologies for invasive species at multiple scales. Funded through national I&M office.	Ongoing	Bishop (Regional Invasive Species Biologist) Boettner (S.O. Conte NFWR) Thompson (DNR-I&M)
3A	<i>National Invasive Species Team</i> Regional Invasive Species Biologist will continue to participate in the National Team.	Team membership	Bishop (Regional Invasive Species Biologist)
ADAPTIVE MANAGEMENT PROJECTS			
1F, 4A	<i>Migrating Landbirds/Shrubland Habitats (AM project, in part)</i> Develop survey protocols for fall migrating landbirds and their stopover habitats. Evaluate habitat management techniques. Provide pilot testing data to contractor for developing survey protocols.	Comparison of survey protocols used in AM and non-AM portions of the study (CJ Ralph, contractor).	Taylor (DNR) Thompson (DNR-I&M)
1F	<i>Assist in modeling and analysis of data from AM projects</i> Hire a modeler to be shared with Region 3.	Statistical modeling assistance for AM projects.	Taylor (DNR) Thompson (DNR-I&M)

Blueprint Objectives and Tasks	Project or Theme; Status	Planned Product	Staff
4C	<i>Integrated Waterbird Management and Monitoring (IWMM)</i> Multi-region, multi-agency project to manage and monitor migrating and wintering waterbirds, including waterfowl, shorebirds, and marsh birds.	Ongoing	Casey (DNR) Thompson (DNR-I&M) Chadbourn (DNR-I&M)
DATA MANAGEMENT			
1C	<i>GRAS Pilot Effort</i> Ongoing national I&M Program to create a centralized repository for compiling, organizing and making accessible recent and historic information that is important to refuge resource management.	On-site visit to Parker River NWR	Chadbourn (DNR-I&M) Thompson (DNR-I&M)
General	<i>Prioritizing Acquisition of Abiotic Data</i> GIS exercise established to identify priority areas for data acquisition in each region. Coordinated by national I&M office.	Prioritization of data	Chadbourn (DNR-I&M)
General	<i>PRIMR Database Team</i> I&M Coordinator will continue to participate in National Team.	Team membership	Thompson (DNR-I&M)

Table 2. Region X Inventory and Monitoring Symposia, Program Reviews, Training, and Workshops Planned

Blueprint Objectives and Tasks	Symposium, Program Review, Training, or Workshop	Planned Date	Staff
COMMUNICATION - TRAINING			
General	Training course: <i>Introduction to Structured Decision Making</i> , at the National Conservation Training Center (NCTC)	5-9 December 2011	Thompson
General	<i>Instructor</i> : Designing a Monitoring Program course at NCTC	2012 TBD	Thompson
General	<i>Instructor</i> : SharePoint 2010 for Site Owners Training, NCTC	November 14-18, 2011 February 6-10, 2012 1-2 more training in FY12 TBD	Chadbourn
General	<i>Instructor</i> : 3-Part Microsoft Access Training that focuses on creating queries, exporting results, creating pivot tables and charts, and creating reports.	TBD, as needed	Chadbourn
General	<i>Instructor</i> : On-Site Trimble/ArcPad training.	March-April 2012, as needed	Chadbourn
COMMUNICATION - PROGRAM REVIEWS			
General	Refuge I&M Plan Workshop @ Ohio River Islands NWR	January 2012	Thompson
General	Refuge I&M Plan Workshop @ Iroquois NWR	26 October 2011	Thompson Taylor
General	Refuge I&M Plan Workshop via WebEx	TBD	Thompson
COMMUNICATION - WORKSHOPS			
1F, 5A	Saltmarsh Integrity Index Workshop – SDM approach for developing a tool for assessing condition of coastal saltmarshes	10-12, 24-26 Jan 2012	Taylor Thompson Chadbourn
5A, 5B	Coastal Shoreline Survey Training Workshop: training developed for refuges participating in shoreline positions surveys in collaboration with National Park Service	TBD, as needed	Chadbourn

4. Budget Narrative and Budget

5. At present, we are on a continuing resolution for FY12 at the FY11 enacted level of \$1.9 M. We anticipate level funding in the coming year.

6. Appendix

- 6.1. List of NWRS stations in the region, by state and LCC.

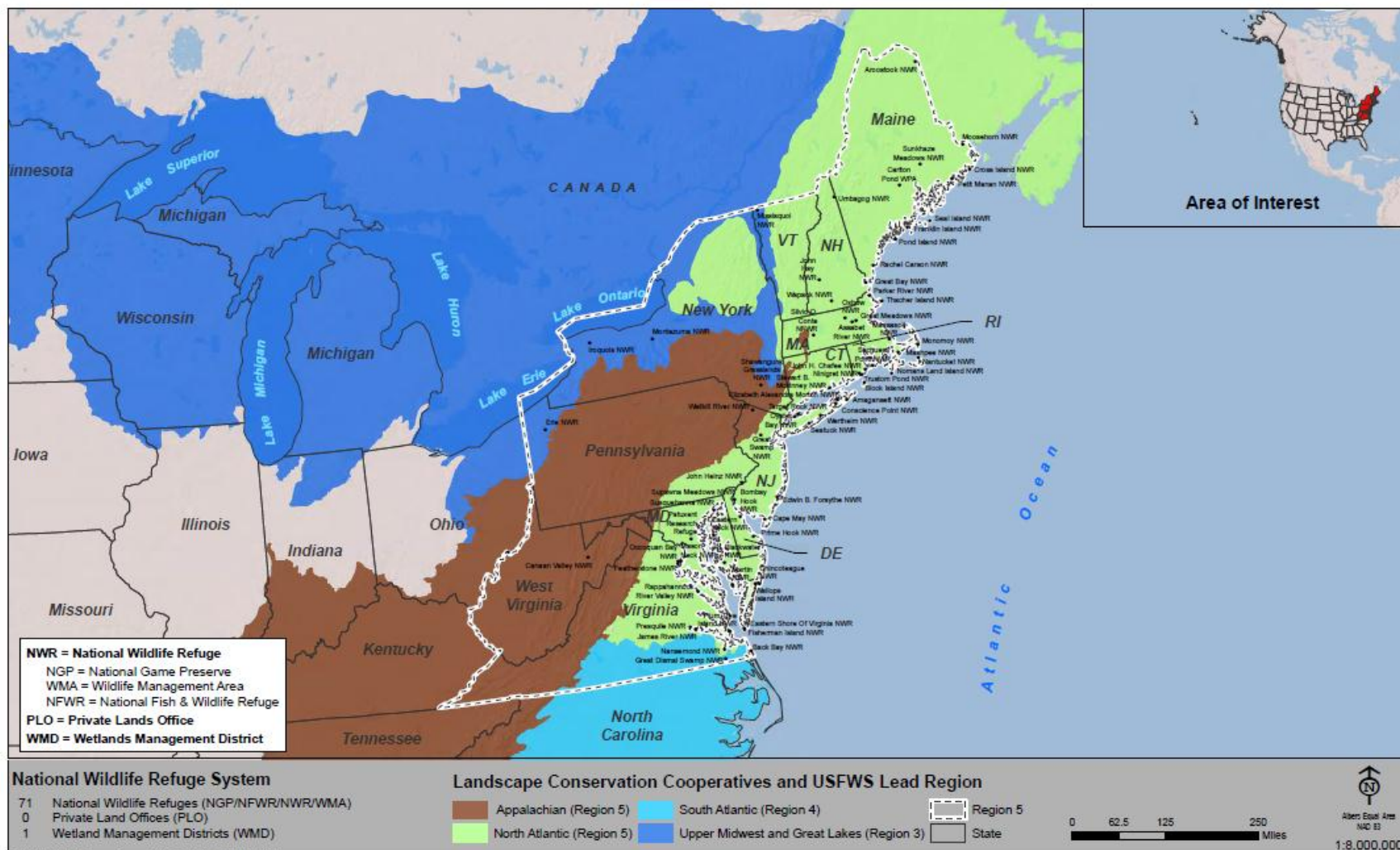


U.S. Fish & Wildlife Service

National Wildlife Refuge System by Landscape Conservation Cooperative

Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia and West Virginia

Region 5



Appendix. Map of NWRS stations in Region 5, by state and LCC.